Message

From: Wozniak, Chris [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=8287E326F7A148FB9870D5D79333DEBC-CHRIS WOZNIAK]

Sent: 3/16/2017 5:28:55 PM

To: Milewski, Elizabeth [Milewski.Elizabeth@epa.gov]; Shimkin, Martha [Shimkin.Martha@epa.gov]; Mendelsohn, Mike

[Mendelsohn.Mike@epa.gov]; Ellis, Frank [Ellis.Frank@epa.gov]; Hartman, Mark [Hartman.Mark@epa.gov]; Leahy,

John [Leahy.John@epa.gov]; Tapken, Wiebke [Tapken.Wiebke@epa.gov]

Subject: RE: quick check on a few sentences for Arnold's talk. SHOULD HAVE REPLIED TO ALL SORRY

Martha,

One point on the natural presence of Wolbachia in mosquito species. Ae. aegypti does not typically have Wolbachia in its cells naturally although there is one literature reference which disputes this. The reason it may be significant is that others are using this point to suggest that the Wolbachia-based population suppression is un-natural for Ae. aegypti; we have based many of our arguments on the widespread occurrence of Wolbachia in many insect species and in the environment in general, but have to admit that such history does not necessarily exist for the Ae. aegypti-Wolbachia combo we are speaking of here. Other species of mosquito may or may not have Wolbachia present.

Chris

From: Milewski, Elizabeth

Sent: Thursday, March 16, 2017 12:27 PM

To: Shimkin, Martha <Shimkin.Martha@epa.gov>; Mendelsohn, Mike <Mendelsohn.Mike@epa.gov>; Ellis, Frank <Ellis.Frank@epa.gov>; Hartman, Mark <Hartman.Mark@epa.gov>; Leahy, John <Leahy.John@epa.gov>; Wozniak, Chris <wozniak.chris@epa.gov>; Tapken, Wiebke <Tapken.Wiebke@epa.gov>

Subject: RE: quick check on a few sentences for Arnold's talk. SHOULD HAVE REPLIED TO ALL SORRY

Are suggestions welcome from everyone listed as an addressee on the email?

From: Shimkin, Martha

Sent: Thursday, March 16, 2017 12:12 PM

To: Mendelsohn, Mike < Mendelsohn.Mike@epa.gov>; Shimkin, Martha < Shimkin.Martha@epa.gov>; Ellis, Frank < Ellis.Frank@epa.gov>; Hartman, Mark < Hartman.Mark@epa.gov>; Leahy, John < Leahy.John@epa.gov>; Milewski,

Elizabeth < Milewski. Elizabeth@epa.gov>; Wozniak, Chris < wozniak.chris@epa.gov>; Tapken, Wiebke

<Tapken.Wiebke@epa.gov>

Subject: FW: quick check on a few sentences for Arnold's talk. SHOULD HAVE REPLIED TO ALL SORRY

Martha Shimkin
Senior Advisor/Special Assistant to the Deputy Director for Management
Office of Pesticide Programs
Environmental Protection Agency
(703) 305-5160

From: Shimkin, Martha

Sent: Thursday, March 16, 2017 12:11 PM
To: McNally, Robert < Mcnally.Robert@epa.gov>

Subject: RE: quick check on a few sentences for Arnold's talk.

I do have something on that.

I am attaching the VERY DRAFT speech as it stands at the moment. I mention IVM a little in the Zika section and you can feel free to add. It is an antimicrobial conf so not exactly vector control theme but....add what you think

Martha Shimkin
Senior Advisor/Special Assistant to the Deputy Director for Management
Office of Pesticide Programs
Environmental Protection Agency
(703) 305-5160

From: McNally, Robert

Sent: Thursday, March 16, 2017 12:09 PM

To:

Subject: RE: quick check on a few sentences for Arnold's talk.

We might want to add a few sentences on IPM, too. Is there something in the talk already?

Frank - can help, if needed.

From: Mendelsohn, Mike

Sent: Thursday, March 16, 2017 11:52 AM **To:** Shimkin, Martha < Shimkin, Martha@epa.gov>

Cc: McNally, Robert < Mcnally, Robert@epa.gov>; Hartman, Mark < Hartman, Mark@epa.gov>; Leahy, John

<<u>Leahy.John@epa.gov</u>>; Milewski, Elizabeth <<u>Milewski, Elizabeth@epa.gov</u>>; Wozniak, Chris <<u>wozniak.chris@epa.gov</u>>;

Tapken, Wiebke < Tapken. Wiebke@epa.gov>

Subject: RE: quick check on a few sentences for Arnold's talk.

Martha,

Here are some suggested edits. I understand the CDC coordination mainly coming from Susan Jennings.

Mike

EPA has issued experimental use permits targeting *Aedes albopictus* and *Aedes aegypti* mosquitoes and has received an application for pesticide registration targeting the *Aedes albopictus* mosquito all with the use of Wolbachia bacteria.

Wolbachia is a bacterium that is estimated to occur naturally in over one million insect species, including some mosquitoes. The bacterium resides within mosquitoes throughout their lifespan. The presence of mismatched Wolbachia strains within mating mosquitoes prevents them from having offspring that survive to adulthood. The technology works by releasing non-biting male mosquitoes with Wolbachia strains

mismatched to those found in wild populations. Over time the mosquito population decreases as less and less viable offspring are produced.

Another product, developed via biotechnology, also uses non-biting male mosquitoes that cannot produce off-spring that survive to adulthood. This product has been overseen by FDA. However, you should be aware that FDA recently published its Draft Guidance for Industry # 236 - Regulation of Mosquito-Related Products which addresses mechanisms that would enable EPA to regulate certain mosquito-related biotechnology products under as pesticides when the developer claims they are intended to control mosquito population levels, and the FDA to regulate them under the FD&C Act when the developer makes other claims, such as a disease prevention claim.

So, you can see that some very cutting edge and truly fascinating work is going on as we speak that addresses these goals from a novel approach.

EPA coordinates with FDA and CDC to consider innovative ways to reduce mosquito populations to control eggs and pupae, as well as the adult mosquito.

Watch for some of these innovative methods because they are really interesting, address resistance issues, and can spark continued innovations and technology.

From: Shimkin, Martha

Sent: Thursday, March 16, 2017 7:57 AM

To: Mendelsohn, Mike < Mendelsohn. Mike@epa.gov>

Subject: RE: quick check on a few sentences?

Thanks. I look forward to your changes.

Martha

(703) 305-5160

From: Mendelsohn, Mike

Sent: Thursday, March 16, 2017 7:45 AM

To: Shimkin, Martha < Shimkin. Martha@epa.gov > **Subject:** Re: quick check on a few sentences?

Martha,

Yes. Will do. I think he can mention both Wolbachia and Oxitec. For Wolbachia, we've had EUPs and a registration application. For Oxitec, it's not here yet, but there is a lot of public info from the company on the web and from FDA on their review of the EA. Further, the transfer of GE mosquitoes for population control was put forward by FDA in their proposed guidance #236. What isn't public is the current status at EPA of the product.

Mike

Sent from my iPhone

On Mar 16, 2017, at 7:28 AM, Shimkin, Martha <Shimkin, Martha@epa.gov> wrote:

Mike: I am preparing speaking points for Arnold to give at a key note address to ChemWatch biocides conference. He wants to include something on the Wolbachia and Oxitech mosquitos but I gather he cannot name companies or products nor state where we are in the process of reviewing. Will you look at what I wrote below and tell me if it is OK? Is there more he is able to say in this public conference?

Please make any changes at all – my whole wealth of knowledge on this is from the briefing and slide from yesterday.....so I'm just stabbing at what I think we can let Arnold say.

Possible to get back to me this morning?

Call/email if you have questions.

Thanks.

Martha (703) 305-5160

Soon we will see other cutting-edge technology launching forward to support vector control.

Some of the details I just can't share right now. But as we look at integrated vector control, in particular for mosquitos, we look at reducing both pest pressure and the ability to spread disease.

Some very cutting edge and truly fascinating work is going on as we speak that addresses these goals from a novel approach.

EPA coordinates with FDA and CDC to consider innovative ways to reduce mosquito populations to control eggs and pupae, as well as the adult mosquito.

Watch for some of these innovative methods because they are really interesting, address resistance issues, and can spark continued innovations and technology.